

House Health Policy Committee. May 26, 2011

Obesity, Diabetes and Kidney Disease  
The Problem and SOLUTIONS

Obesity in Michigan

- 31% are obese (27% in the U.S.)
- 36% are overweight (36% in the U.S.)
- Michigan was the 10<sup>th</sup> most obese state in the nation in 2010.

Diabetes:

- Obesity is linked to serious diseases like Type 2 diabetes, and high blood pressure, heart disease, stroke, and increased health care costs.
- Due to the epidemic of obesity, diabetes, formerly a rare disease, is now one of the most common diseases in the world.
- Over 13% of Michigan adults have diabetes, but 1/3 of these people are undiagnosed.
- 29% have prediabetes - people with blood sugar levels higher than normal who will often develop Type 2 diabetes unless they make changes in their lifestyle.

Kidney Disease/Failure:

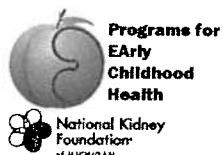
- Diabetes is the leading cause of kidney failure.
- When diabetes increases, kidney disease increases.
- Over 9% Michigan adults have chronic kidney disease, but most don't know it.

SOLUTIONS:

- **Recent studies show that people at high risk for diabetes can reduce their development of diabetes through weight loss and increased physical activity.**
- **Improving blood glucose and blood pressure control in people with diabetes reduces the risk for kidney disease by 33-10%.**

Programs implemented from the Diabetes and Kidney Programs Line (Michigan Department of Community Health budget) and the National Kidney Foundation of Michigan provide positive outcomes through programs that:

- Are solution driven, evidence-based with positive outcomes and based in communities and health care systems.
- Focus on Minority populations because of their high risks for diabetes, high blood pressure and chronic kidney disease.
- Address obesity prevention and assisting people who struggle with obesity to attain a healthy weight
  - **Enhance Fitness** – increases physical activity, strength and weight loss
    - OmniCare Health Plan enrollees are utilizing this program
  - **Personal Action Toward Health (PATH)** – teaches skills for lifestyle changes to loose weight and is available statewide
  - **PEACH** - Programs for Early Childhood Hhealth – teaches children and their parents about nutrition and physical activity to reduce childhood obesity. (see attached)



## PEACH Programs

The Michigan Department of Community Health, the National Kidney Foundation of Michigan (NKFM), and Metro Health Foundation have partnered to bring an innovative community-based health education and health behavior change program to early childhood education facilities. The programs have been implemented in 58 Head Start centers, Great Start and non profit agencies that focus on early childhood education.

### I. Healthy Families Start with You (HFSY)

The HFSY Program involves training staff members to have "health chats" with parents, during which they explain the association between nutrition, physical activity, and chronic diseases to the parents and encourage them to adopt healthier behaviors.

NKFM staff has trained 120 Family Service Workers to become lay health educators, who have reached a total of 700 adults in six campaigns.

**69% of adults and 60% of their children** made at least one healthy lifestyle change. **52%** of parents improved the way they cooked for their family (e.g., more baking, less frying), and **66%** changed their food shopping methods.

**46%** of parents made **both** of these changes. **56%** of parents indicated that they had visited or made an appointment with their primary care doctor between Chats 1 and 2.

	Adults	Children
Increased servings of fruit per day	32%	33%
Increased servings of vegetables per day	26%	31%
Decreased fast food consumption	28%	36%
Decreased consumption of pop	35%	9%
Decreased television viewing	39%	39%
Increased weekly physical activity	45%	43%

### II. Regie's Rainbow Adventures™



The Regie's Rainbow Adventures program is a 7 week curriculum that emphasizes eating fruits and vegetables that are the colors of the rainbow.

	Students	Parents
Increase in the identification of healthy foods	44%	---
Increase in the identification of healthy beverages	41%	---
Increase in the identification of healthy leisure time activity	29%	---
Increased fruit consumption	72%	73%
Increased vegetable consumption	76%	71%
Increased levels of physical activity	81%	81%

NKFM staff has trained

100 Teachers to use the Regie's Rainbow Adventure curriculum, reaching 2,500 children. One parent commented *"grocery shopping has become quite interesting since my child became involved with the Regie's Rainbow Adventure program. Each week I have to buy the colored fruits and vegetables that Regie eats so my child can be just like Regie."*

### III. Nutrition and Physical Activity Self Assessment for Child Care (NAP SACC)

NAP SACC is designed to improve center nutrition and physical activity policy in the childcare setting. First, a self-assessment instrument is used to assess center nutrition and physical activity policies, practices, and overall environment. Action plans are then made to improve areas of concern. (Five continuing education workshops are available to staff on (1) Childhood Overweight, (2) Healthy Eating for Children, (3) Physical Activity for Children, (4) Personal Health and Wellness for Staff, and (5) Working with Families.) Recent reports indicate that 26% of children, between the ages of two and five, are classified as either at risk for becoming overweight or are overweight. 74% of children ages 3 to 6 go to a non-parental day care and 56% are center based child care programs. These children consume half to all of their Recommended Dietary Allowances while at a child care facility. This can include 3 meals a day and snacks and contribute significantly to their daily calories and essential nutrients. Also much of their physical activity is also exerted during play time at their day care facility.

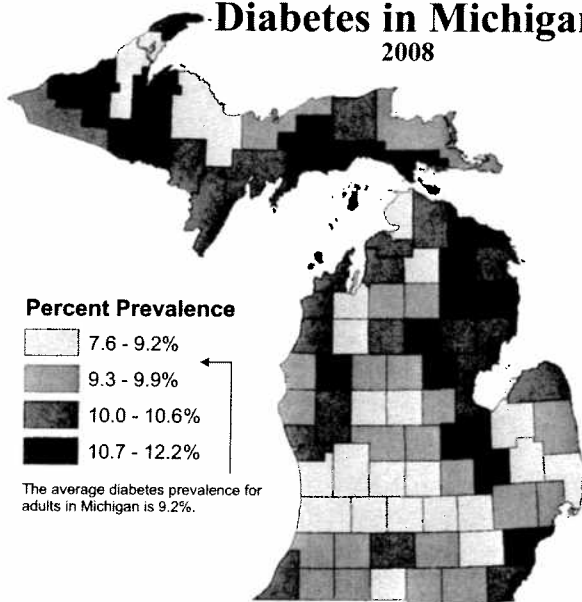
**Please support  
Diabetes and  
Kidney Programs  
in the Michigan  
Department of  
Community Health  
budget.**

# Diabetes and Kidney Disease Prevention A Model "Public-Private Partnership"

2011 Guide for Michigan Legislators Showcasing Programs That:

- Provide value for money invested
- Improve health
- Reduce health care costs, and
- Bring "match dollars" to Michigan.

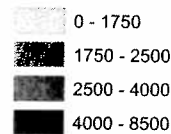
## Diabetes in Michigan 2008



## Kidney Failure in Michigan 2009

Diabetes caused  
41% of kidney failure  
in Michigan in 2009

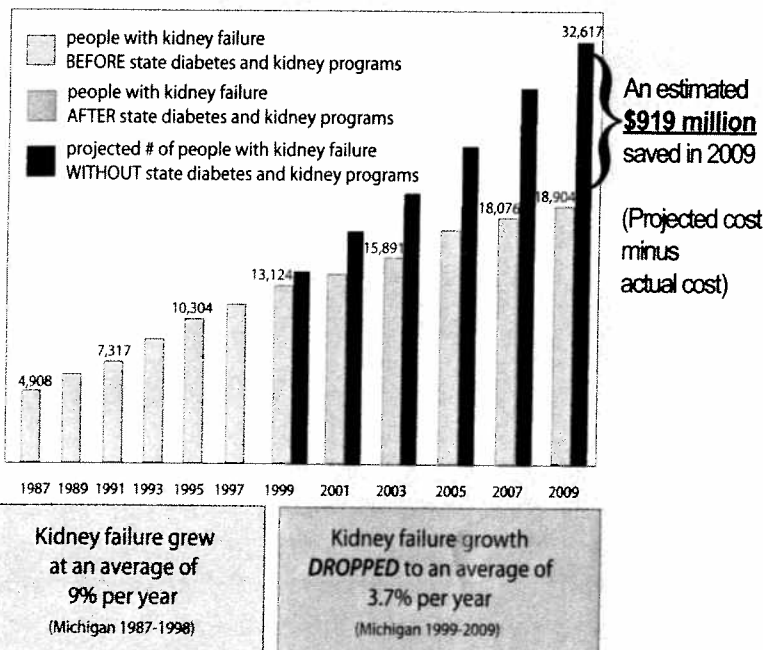
### Rate per million adults



The average prevalence of kidney failure for adults in Michigan is 2500 per million.

## Reasons to Continue Funding Diabetes and Kidney Disease Prevention Programs

### ● Reducing the Number of People with Kidney Failure Saves Money.



Renal Network 11 Annual Reports and National Kidney Foundation of Michigan

### ● Funding brings "match dollars" to Michigan.

The Michigan Department of Community Health Diabetes Prevention and Control Program receives a **\$4 : \$1 match** from the U.S. Centers for Disease Control and Prevention.

The National Kidney Foundation of Michigan receives a **\$6 : \$1 match** from private and federal sources.

### ● The Diabetes and Kidney Programs were at the top of the list when the "Price of Government" ranked 139 Michigan Department of Community Health budget lines in 2005.

Price of Government Rankings -2005	
1	Immunization
1	Implement PA 133 MCL 333.17015
1	School health and ed. programs
4	Mental health for older persons
4	Diabetes and kidney programs
5	Special adjutor payments

# Maintain Evidence-Ba

## ~Keeping Kids Healthy~ Programs in Pre-Schools, Elementary and High Schools

### Healthy Families Start with You and Regie's Rainbow Adventure™

This is a multi generational program (often partnering with Head Start) to promote healthy lifestyle changes.



Served since 2006: 12,400

Locations: Various cities in Ingham, Macomb, Monroe, Oakland, Washtenaw, Livingston and Wayne Counties

Outcomes: 73% of adults and 58% of children report making at least one healthy lifestyle change.

### Kids and Kidneys

Elementary school students learn about good nutrition, exercise and disease prevention.

KICK (Kids Interested in the Care of their Kidneys)  
High school students learn about diabetes, high blood pressure, disease prevention and organ donation.

### Healthy Kids and Kidneys

This intensive 8 week program is designed for 6th grade students who are at high-risk for diabetes, high blood pressure and kidney disease. Students learn how to improve their nutrition and exercise habits to stay healthy.

Served in 2010: 82,264

Served since 1997: Over 1.2 million kids

Locations: Statewide

Outcomes: Elementary and high school students show a 15% increase in knowledge from pre to post test.

## ~Improving Health in Disparate Populations~ in Rural Areas and Minority Communities

The prevalence of diabetes is 17% higher in rural counties than in urban areas.

### Upper Peninsula Diabetes Outreach Network

(UPDON): Based in Marquette, UPDON is a 15 county organization that promotes partnerships to strengthen diabetes prevention and detection throughout the entire Upper Peninsula (UP). UPDON coordinates:

- Professional Education and Consumer Resources
- Personal Action Toward Health (PATH) workshops
- Tribal, Community and Clinical Partnerships

### Northern Michigan Diabetes Initiative (NMDI):

Based in Traverse City, NMDI is an 11 county collaborative of health and community organizations to prevent and manage diabetes. Since 2006 NMDI has achieved:

- 30% increase in screenings for A1C, LDL, and microalbumin for kidney disease
- 23% increase in A1C screenings to detect diabetes
- 14% increase in physician referrals of patients to Diabetes Self-Management Education

The prevalence of diabetes, high blood pressure and kidney disease is higher in minority populations.

### Healthy Hair Starts With a Healthy Body™ and Dodge the Punch; Live Right:™

African American beauty salon stylists and barbers are trained to provide health education in their communities. Healthy lifestyles and other ways to prevent diabetes, high blood pressure and kidney disease are key messages.



Served since 1999: 41,900 clients

Locations: Detroit, Flint, Grand Rapids, Southfield, Lansing, Muskegon, Pontiac, Saginaw, Inkster, Ypsilanti

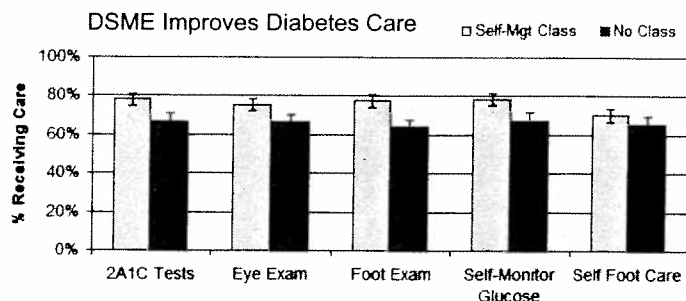
Outcomes: 56% of salon clients and 62% of barber-shop clients made at least one healthy lifestyle change and improved medication adherence.

# ed Programs That Work!

## ~Helping People Help Themselves~ Disease Prevention and Management Programs

### **Diabetes Self Management Education (DSME)**

Diabetes is largely self-managed and patients are responsible for 99% of their care. *DSME is critical.* Analysis of disease-management combined with diabetes self-management education found a return on investment (ROI) of \$4.34 : \$1.



Served in 2010: 30,531

Locations: Statewide

**Outcomes:** Health care costs are reduced by an estimated \$1,000 per patient per year.

**Estimated Savings in 2010:** \$30 million

### **EnhanceFitness**

This low-cost, evidence-based program helps participants increase their strength and activity levels.



Served in 2010: 1,695 in Southeast MI

Locations: 65 sites in Southeast, Central, West and Southwest Michigan

**Outcomes:** Increased energy, strength, weight loss, and in some cases lower blood pressure or blood sugar levels - resulting in potential savings of \$755 per person, per year.

**Estimated Savings in 2010:** Up to \$1.2 million

### **Personal Action Toward Health (PATH)**

PATH is an evidence-based workshop that provides training to adults with chronic health conditions.



Served in 2010: 2,235

Served since 2007: 6,215

Locations: 64 of Michigan's 83 counties

**Outcomes:** Health care costs are reduced by an estimated \$2,000 per person every 2 years. Better disease self-management results in fewer hospitalizations and physician visits.

**Estimated Savings in 2010:** \$2 million

### **WISEWOMAN**

Well-Integrated Screenings and Evaluations for Women Across the Nation



WISEWOMAN provides low-income women with diabetes screenings and information to improve their diet and physical activity levels, to maintain health.

WISEWOMAN  
Garden Project



Served 2008-2010: 7,638

Locations: 34 of Michigan's 83 counties

**Outcomes:** 141 diagnosed with diabetes  
954 women diagnosed with prediabetes

## **Diabetes is common, costly, and serious; but can often be prevented or managed.**

- Over 13% of adults in Michigan have diabetes (9% diagnosed and 4% undiagnosed).
- **29% have prediabetes.**
- African Americans and Native Americans have twice the prevalence of diagnosed diabetes, Hispanics have 75% more and Asians and Pacific Islanders have 55% more.

People with unmanaged diabetes often have complications:

- Kidney Disease/Failure
- Blindness
- Amputation
- Heart Attack or Stroke

Nationally, 60% of people with diabetes have one or more diabetes-related complications.

### **The good news:**

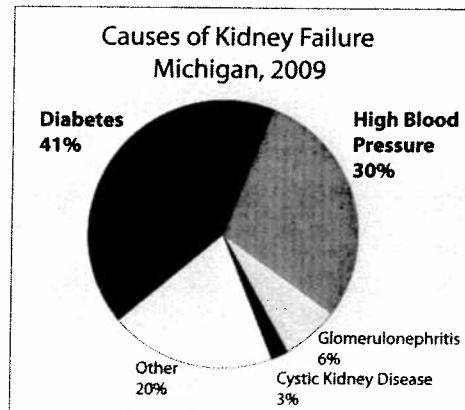
Lifestyle interventions (weight loss and physical activity) can prevent type 2 diabetes. (95% of people with diabetes have type 2.) Diabetes management to help normalize blood sugar levels can often prevent or delay complications from diabetes.

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- In 2007 the medical cost of diabetes in the U.S. was \$116 billion. Indirect costs were \$58 billion.
- **Total: \$174 billion.**
- People with diabetes have medical costs that are 2.3 times higher than people with other chronic diseases.
- **1 in 10 health care dollars is spent on diabetes.**
- Michigan could save an estimated \$545 million across all chronic diseases by investing \$10 in preventive care per person per year.

## **Chronic Kidney Disease (CKD) doesn't always have to lead to kidney failure.**

- Over 9% of adults in Michigan have CKD, but most don't know it.
- In 2009, 18,500 people in Michigan were being treated for kidney failure.
- African Americans are at a 4.5 times greater risk of kidney failure than Caucasians.



### **The good news:**

Diabetes and high blood pressure don't have to lead to chronic kidney disease/kidney failure. Prevention and management of diabetes and high blood pressure are key. CKD detection (Glomerular Filtration Rate (GFR) from a blood test) and treatment are also critical.

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- In 2007 Medicare spent \$24 billion on patients with kidney failure. Non-Medicare costs were \$11 billion.
- **Total \$35 billion.**
- Dialysis treatments cost \$70,000 per patient per year, but \$76,000 if the patient has diabetes.
- 32% of the Medicare spending is on CKD and kidney failure.
- Costs to Michigan Medicaid for people on dialysis are estimated to be \$25.6 million.

**NEW in 2011! Communities Against Diabetes** This 5 year Centers for Disease Control and Prevention grant project will utilize talent from the National Kidney Foundation of Michigan, the Michigan Department of Community Health Diabetes Prevention and Control Program, the University of Michigan, and other statewide partners. The goal of this project is to eliminate diabetes-related disparities in vulnerable populations in the targeted communities of Flint, northwest Detroit and Inkster.

Diabetes Partners in Action Coalition



www.dpacmi.org  
517-335-8378

National Kidney Foundation of Michigan



National  
Kidney  
Foundation  
www.nkfm.org  
800-482-1455



Only 8% of charities receive 4 stars  
from Charity Navigator